# Sierra Valley RCD

Middle Fork Feather Watershed

**Amount Funded**: \$185,460

**Additional Funding Obtained to Date: \$850,680** 

# **Background**

The mountainous, forested landscape provides crucial habitat for many different species of plants and animals. Throughout the watershed, small rural communities thrive. The area hosts visitors who come to outdoor recreational activities such as hiking, biking, bird watching and skiing. As the population increases, so does the impact on the region's natural resources. The potential threat from wild fires is greater today than ever before. Old roads, once used by timber and mining companies, can contribute sediment in rivers and creeks. On the valley floor, naturally meandering streams have been altered to accommodate flow-controlled irrigation ditches. The issues are complex and the need great. Therefore, it is imperative that a comprehensive, collaborative approach be used to address the many problems facing this watershed.

### **Benefits to the Watershed**

- Worked with the US Forest Service and the CA Department of Fish and Game to begin building a long-term management plan for Antelope Valley.
- Started developing an action plan that will focus on education and outreach. This effort will involve developing a partnership with the USFS and Plumas-Sierra Weeds Group, to further the control and eradication of noxious weed populations in the Sierra Valley.
- Worked in partnership with the University of California Cooperative Extension (UCCE) Proposition 50



The watershed coordinator conducts water quality monitoring with UCCE staff

- grant coordinator to help gather information through research and monitoring of seven key sites in the watershed.
- ◆ Coordinated the second annual Barns, Birds, & Barbeque (BBB) event. The watershed coordinator worked with the RCD Manager to coordinate the event with a diverse group of organizations. Over 300 people attended the event and learned about the watershed through booths, tours, and a native plant walk.

- Developed a close partnership with the Feather River Coordinated Resource Management group (FRCRM), on Little Last Chance Creek. The FRCRM secured funding for restoration work on a four-mile stretch of the creek. The coordinator provided assistance with stream monitoring (temperature probe placement & frog surveys) and will continue to collaborate with FRCRM.
- Assisted with the execution of the Department of Fish and Game (DFG) and SVRCD Master Lease Agreement. SVRCD will manage five areas within Sierra Valley ensuring that lands are properly grazed and protected. The coordinator also provided DFG with recommendations on rehabilitation strategies related to the Harding Fire and input on resource needs.
- Worked with Sierra Valley Groundwater Management District to identify and address common issues and concerns.
- Partnered with High Sierra RC&D and the UCCE in developing a workshop on water rights/restoration projects.
- Worked with the Honey Lake Valley and Central Modoc RCDs to identify and secure funding to purchase water-monitoring equipment.
- Established a program to conduct noxious weed spraying in the community.

# **Benefits to CALFED Program**

Watershed Management - The coordinator supported the goals of the CALFED Watershed Program by providing stakeholders with educational opportunities and providing assistance to local landowners groups. This year the coordinator facilitated the Barns, Birds & Barbeque event. This event was crucial in educating the public about the Sierra Valley Watershed. Over 300 participants attended the event. The coordinator was also instrumental in initiating training for the Sierra County Fire Safe Council and Watershed Council. Finally, the coordinator provided local landowners on Little Last Chance creek with assistance in starting a Coordinated Resource Management group to repair and improve the watershed of Little Last Chance Creek. The coordinator contacted all the Little Last Chance Creek residents, DFG, and FRCRM watershed experts to begin designing watershed improvement project s.

**Ecosystem Restoration** – The coordinator supported the goals of the ecosystem restoration program by starting a noxious weed spraying program in the watershed. The coordinator worked with Plumas/Sierra Ag. Commissioner, UC Cooperative Extension and Monterey Forum to secure \$40,000 and initiate a spray program.

**Drinking Water Quality** – The coordinator worked with UCCE staff to help gather information through research and conducting water quality monitoring at seven key sites in watershed. The seven monitoring sites include: Little Last Chance, Middle Fork Feather River, Perry Creek, Turner Creek, Smithneck Creek, Steel Bridge and Upper Cold Creek.

#### **Performance Measures**

Goal: Improve watershed conditions on the tributaries to the Middle Fork Feather River.

**Objective 1:** Utilizing the Sierra Valley Watershed Action Plan and the Sierra Valley Watershed Assessment, seek opportunities to implement identified watershed improvement projects, including sponsoring education workshops.

**Performance Measure:** Develop a community watershed action plan for Sierra Valley Watershed.

# **Progress:**

The coordinator compiled a list of recommendations from Sierra Valley Coordinated Resource Management group (SVCRM) and the Watershed Assessment Report. The coordinator also conducted a survey of various watershed stakeholders to determine priorities for watershed improvement projects. This information will be critical in developing the Watershed Action Plan (WAP).

Other activities the coordinator completed to help achieve this performance measure include:

- Developing a partnership with the Department of Fish and Game to manage five wildlife areas during 2006. This partnership includes collaborating on potential projects and gathering data on priority areas.
- Working with DFG & Tahoe USFS on developing a long-term management plan for Antelope Valley
- Completed the Watershed Assessment Report and distributed it to watershed groups and other stakeholders. The reports findings will be incorporated into the WAP.

This performance measure is approximately 45% complete.

**Objective 2:** Seek funding opportunities for Action Plan-identified watershed improvement projects in the Sierra Valley watershed.

**Performance Measure:** Apply for at least 2 grants/agreements to implement watershed improvement projects in the Sierra Valley watershed.

**Progress:** The coordinator has applied for and obtained funding for several watershed improvement projects. Specifically the coordinator:

- Completed a Master Lease Agreement with DFG. Under the agreement SVRCD will manage five areas within Sierra Valley ensuring that lands are properly grazed and protected. This agreement will provide the RCD with funding to pay for additional watershed coordination.
- Secured funding for a 2006 noxious weed program that will help protect the watershed.
- Finally the coordinator obtained capacity building funding through the Plumas Forum and the Monterey Settlement. This funding was used to hire a district manager with is assisting the watershed coordinator with research and competing the WAP.

This performance measure is complete.

**Objective 3:** Utilizing community outreach in a priority area previously identified by the SVCRM, develop a watershed action plan that addresses resource concerns, including known concerns of hydrophobic soils and flood control.

**Performance Measure:** Apply for at least 2 grants/agreements to implement watershed improvement projects in the Sierra Valley watershed and sponsor at least one educational workshop.

**Progress:** The coordinator has obtained funding and coordinated educational events. Progress towards completing this performance measure includes:

- Securing a grant for a Sustainable Agriculture workshop. This workshop will provide demonstrations of Best Management Practices to the local agricultural community.
- Received an ATTRA grant that will provide local landowners with assistance and education about sustainable agricultural alternatives.
- Secured a grant for 2005 Barns Birds & Barbeque educational event.
- Secured funds in 2005 for a *Tools for Working Landscapes* workshop, which promoted good land stewardship in Sierra Valley.
- Conducted a Conservation Easement/Williamson Act workshop in 2005.

This performance measure is complete.

# **Sloughhouse RCD**

Lower Cosumnes-Lower Mokelumne and Upper Cosumnes Watersheds

**Amount Funded**: \$149,044

**Additional Funding Obtained to Date: \$53,550** 



# **Background**

The Cosumnes River Watershed is one of California's most pristine river systems. It is a significant contributor to the San Francisco Bay-Sacramento Delta water supply and home to many threatened and endangered species. However, U.S. Army Corps of Engineers surveys show that the watershed suffers from many water quality problems including excessive sediment transport and degradation of the riverbed, erosion and channel incision, levee failure and flooding, and loss of aquatic and riparian habitat.

Note: The watershed coordinator left her position in early 2006. The new coordinator was not yet in place when the second annual report was due.

# **Benefits to the Watershed**

- Helped five ranch owners and managers complete water quality plans for their property.
- Submitted a \$176,997 concept proposal to the Department of Water Resources for education and outreach in the watershed.
- Assisted in World Water Quality Monitoring Day in which students from 4 high schools and 2 elementary schools tested water quality.
- Recruited five landowners to attend a Farm Water Quality Workshop.
- Collected an additional \$1,300 in cash contributions for the Cosumnes River Watershed Portal.
- Recruited five speakers to present information about the watershed at Cosumnes River Watershed Council meetings.
- Submitted two educational articles about the watershed for the Farm Bureau newsletter and attended various meetings to inform watershed residents about current watershed activities.

### **Benefits to CALFED Program**

**Watershed Management** – This quarter the coordinator supported CALFED goals of working with the community to improve watershed health and promote collaboration among community watershed efforts. The coordinator provided information to watershed council members, gathered information and donations for a watershed portal, attending several meetings to share and gather information, worked with landowners to create water quality plans, and provided an opportunity for students to learn about water quality monitoring.

**Ecosystem restoration** – This quarter the coordinator submitted a \$176,997 grant proposal to DWR to fund a Resident's Guide to Watershed Enhancement Using Best Management Practices. The coordinator also worked with the community to create water quality plans and monitor water quality.

**Goal:** Improve and protect watershed resources through cooperative, comprehensive, and watershed-wide resources management by all public and private stakeholders

**Objective** # 1: Manage watershed resources in a manner that promotes improved watershed health

**Performance Measure:** To ensure available resources for watershed improvement are used in the most cost efficient, effective, and beneficial manner, success of this objective will be gauged by the successful installation of a watershed-wide management structure to (be) deemed successfully installed when one Watershed Council has been created, one Watershed Management Plan has been developed, and four grants in support of Watershed Council goals and/or Watershed Management Plan objectives have been submitted. Additionally, five Cosumnes River Task Force meetings will be conducted.

# **Progress:**

- Five Cosumnes River Task Force meetings conducted.
- The Cosumnes River Watershed Council has been created and three meetings have been held.
- The coordinator worked with the Council to determine the goals of the watershed management plan. They decided that the first step would be to develop a Watershed Portal for the Cosumnes River (on-line library).
- The Coordinator obtained \$2,250.00 in cash contributions towards the creating of a Watershed Portal.
- The Coordinator secured the domain name www.cosumneswatershed.net for the portal and signed a contract with Wolf & Associates to create the portal.

**Objective 2:** Implement the Watershed Management Plan on a local level through the development of a Watershed Stewardship Program.

Performance Measure: To ensure goals and objectives identified within Watershed Management Plan are implemented at a local level, 4 watershed Stewardship Groups will be formed, 4 local management plans will be created, the Watershed Coordinator will attend 2 water quality trainings, 8 training workbooks will be prepared, water quality monitoring equipment will be purchase 8 trainers will be trained, 8 water quality monitoring sites will be identified, 4 water quality monitoring snap shot days will be conducted including the transferring of results to the America's Clean Water Foundation.

#### **Progress:**

Four Watershed Council Subcommittees were formed, including: Fire, Biological Resources, Water Resources and Education & Outreach.

**Objective # 3:** Implement watershed education and outreach programs that promote improved water quality, water conservation, and ecosystem preservation and restoration.

**Performance Measure:** To ensure outreach and education programs are having a positive effect, 15 ranches will be checked for BMPs implementation and their assessments reviewed for indications of improvement. To be deemed successful, 10 ranches will have implemented BMPs and their assessment will indicate improvements. In addition a BMPs committee will have been formed, 5 BMPs fact sheets will be developed, BMPs fact sheets will be made available to the public, 6 workshop presenters will be selected for the Ranch Water Quality Management Planning Workshops, 3 training sessions will be attended by the Watershed Coordinator, 1 Workshop Instructor's manual will be prepared, 3 Ranch Water Quality Management Planning Workshops will be conducted, 3 tours of ranch conservation projects will be conducted, a minimum of 15 ranch plans will have been completed, a minimum of 6 cost share/grant applications will be submitted, 400 Backyard Conservation packets will be distributed, and 25% of the follow-up surveys will be completed and returned.

# **Progress:**

- Created two BMP fact sheets. One for small landowners with noxious weed infestations and one for landowners with invasive species problems.
- Worked with Solano RCD on a Farm Water Quality Workshop. The coordinator recruited 6 participants from Sacramento County.

# Solano RCD

Lower Sacramento and Upper Putah Watersheds

**Amount Funded**: \$208,100

**Additional Funding Obtained to Date: \$343,450** 



# **Background**

Solano County is undergoing rapid development and urbanization as a result of its proximity to the San Francisco Bay and the Sacramento Metropolitan areas. Excessive erosion and sedimentation are major concerns in the watershed. The Regional Water Quality Control Board believes agricultural runoff is an issue as well. Baseline testing is needed to provide understanding of the current state of the watershed and to plan for best management strategies and practices.

# **Benefits to the Watershed**

- Submitted over \$2 million in funding proposals to further watershed enhancement, restoration, and conservation activities throughout the watershed.
- Started a collaborative conservation partnership with Yolo and Solano County restoration and conservation agencies and organizations. The group will allow members to leverage resources, create collaborative proposals, and share expertise.
- Worked with Yolo RCD to develop the Ag Water Quality Program to help farmers effectively implement practices to help meet Sacramento Valley Regional Water Quality Control Board conditional waiver requirements.
- Worked with a variety of large and small stakeholder groups to implement conservation projects on private property.
- Worked with a variety of county agencies to provide education and outreach within the watershed. The coordinator helped implement the Solano County Water Agency's Flood Education program, Fairfield Suisun Sewer District's (FSSD) high school Watershed Education Program, the Putah Creek Discovery Corridor's Waterways elementary school program, and a new Watershed Explorers program sponsored by FSSD and Vallejo Sanitation and Flood Control District.
- Conducted the annual Solano Weed Management Area meeting.
- Began working with landowner in Quail Canyon to develop a watershed group.
- Facilitated a conservation partnership between Solano and Yolo RCDs, land trusts, NRCS, and conservation based nongovernmental organizations.
- Coordinated the combined efforts of Solano and Napa County environmental management departments to improve recycling and oil waste reduction in Lake Berryessa, leverage grant funds, and share expertise to improve water quality.
- Planned a Solono County Flood Preparedness manual for distribution in Fall 2006.

#### **Benefits to CALFED Program**

**Watershed Management** – In support of the Watershed Program goal of improving collaboration between agencies, watershed groups, and stakeholders, the coordinator: facilitated the Yolo-Solano Conservation Partnership; facilitated the Solano County Weed Management Area meetings; participated in the Putah Creek Discovery Corridor Cooperative; and facilitated the Lake Berryessa Watershed Partnership Science Committee.

**Ecosystem Restoration** – The coordinator facilitated the completion of an oak restoration project on Solano Land Trust properties.

**Drinking Water Quality** – The coordinator worked with partners to help develop an oil waste reduction and recycling program for Lake Berryessa.

# **Performance Measures**

**Goal 1:** Facilitate and participate in expanded and improved regional and subwatershed collaboration to improve stewardship capacity at multiple levels.

**Objective 1:** Facilitate the Solano Watershed Partnership Group, bringing together agency and NGO personnel across the region to collaborate and prioritize watershed goals.

**Performance Measure:** At least 25 regional representatives committed to attending quarterly meetings and directing staff and cash resources toward watershed goals, demonstrated by a letter of commitment to the program.

#### **Progress:**

- Facilitated Ag waiver annual meetings, which were attended by an average of 40 stakeholders.
- Facilitated the Solano County Weed Management Area working group, comprised of agency and private stakeholders. The coordinator planned and conducted two annual meetings, in 2005 and 2006, to provide outreach and information to watershed stakeholders.
- Facilitated the Yolo-Solano Conservation Partnership formation and regular meetings. The partnership includes representatives from Yolo, Dixon, and Solano RCDs, Solano Land Trust, the Center for Land Based Learning, and CA Audubon.

**Objective 2:** Facilitate integrated coordination of the Putah Creek Watershed, working with watershed managers and stakeholders from four counties.

**Performance Measure:** Active stewardship group of 30 regular, committed participants, source water protection plan for Lake Berryessa, USEPA Water Quality grant objectives are met.

• The Lake Berryessa Watershed Partnership has met quarterly to:

- o Complete a draft of a Source Water Protection Plan;
- O Plan summer outreach and education activities, including oil recycling at all marinas, a Water Protector Outreach boat, and participation in lake events such as Summer Splash and National Marina Day;
- o Secure funding to increase lake outreach resources and personnel.

**Objective 3:** Facilitate existing and emergent stewardship group development.

**Performance Measure:** Membership documentation and work plans for new stewardship groups, watershed management plans for Sweeney and Pleasants Creek.

# **Progress:**

- Worked with stakeholders from Quail Canyon to begin developing a Pleasants Creek watershed group.
- Worked with Alamo Creek stakeholders to develop a creek restoration plan below the Vacaville sewage facility.

**Goal 2:** Improve water quality in the Ulatis-Dixon subwatersheds.

**Objective 1:** Monitor and reduce non-point source pollution entering the watershed from rural lands.

**Performance Measure:** Baseline pollution constituents determined; stewardship responses determined and implemented.

### **Progress:**

- Coordinated the implementation of a monitoring plan.
- Ensured that water quality testing occurred as scheduled.
- Helped form a Yolo-Solano Ag Water Quality Working group consisting of Yolo, Dixon, and Solano RCDs, NRCS, Ag Commissioners, and the Farm Bureau. The purpose of the group is to design and implement a program to help landowners meet SWRCB's conditional ag waiver requirements.

Goal 3: Increase stakeholder understanding and ability to serve as good watershed stewards.

**Objective 1:** Develop a comprehensive, measurable watershed education program for all stakeholders.

**Performance Measure:** Watershed education plan with buy-in and financial support by ten partners; self-evaluation from 150 participants per year, measuring watershed behavioral changes made in response to program.

#### **Progress:**

Worked with partners to develop plans for watershed educational activities at Lake Berryessa and the greater watershed.

**Objective 2:** Develop a suite of specialized education programs to address "hot" issues in the watershed

**Performance Measure:** Stand-alone and specialized education modules, with buy-in and financial support by three partners, self-evaluation of 100 participants per year, measuring behavioral and educational changes resulting from specialized education.

#### **Progress:**

- Worked with Solano RCD Biologist to create readers, lab manuals, monitoring manuals, and syllabi for four high school classrooms.
- Implemented the Waterways primary education program for Solano County elementary school students to teach students about the Putah Creek watershed at Lake Solano.
- Developed the Watershed Explorers program with funding from Fairfield Suisun Sewer
  District and Vallejo Flood and Sanitation district. The program will take southwest Solano
  County elementary school students into the watershed to learn about the watershed and how
  they can help conserve it.

**Objective 3:** Install and monitor discrete watershed restoration projects around the watershed to demonstrate best management practices and results.

**Performance Measure:** Three demonstration watershed improvement projects installed per year; monitoring information for practice efficacy provided quarterly to SRCD's website.

#### **Progress:**

- Two on-farm demonstration projects have been completed. Monitoring is currently being conducted.
- A creek restoration/mitigation project was completed on Rindler Creek. Monitoring is currently underway.
- Work is ongoing at two oak restoration sites on Solano Land Trust properties.

Goal 4: Increase durability of stewardship activities with innovative partnerships and funding scenarios.

**Objective 1:** Develop a comprehensive, measurable funding strategy for the watershed to move important projects away from the vagaries of soft money funding.

**Performance Measure:** Partner support and buy-in for a watershed wide funding strategy, \$500,000 in secured funding for projects supported by this proposal.

# **Progress:**

- Received a Water Quality Grant in partnership with Yolo County RCD. Solano RCD's share is \$208,000.
- Secured contracts for restoration and biomonitoring work with Vallejo Sanitation District.
- Wrote a Yolo-Solano Ecosystem Restoration Program grant in partnership with Yolo County RCD and CA Audubon. The proposal requested \$2,001,450 to expand watershed-wide partnerships and collaboration in restoration activities.
- Developed a Yolo-Solano Conservation Partnership stakeholder group.

# **Sonoma Ecology Center**

San Pablo Bay Watershed

**Amount Funded**: \$155,193

**Additional Funding Obtained to Date: \$591,793** 

# **Background**

Land ownership in the Sonoma Creek watershed is 85% private, with land uses ranging from redwood groves to chaparral, oak savannah to diked tidal marsh, vineyards to hayfields, rural estates to dense low-income neighborhoods. Watershed impacts arise from a history of ranching, logging, and farming since 1823, and increasing urbanization and ranchette development since the 1950s. However, the watershed's fishery is one of the best remaining in the Bay-Delta region due to its diversity and lack of non-native species.

#### Benefits to the Watershed

- Worked with Napa River watershed coordinator to create the North Bay Watershed Network. The network is a forum for over 15 watershed groups and organizations to share successful approaches and materials, and coordinate efforts.
- Provided assistance to over 50 landowners, residents, newspapers, and officials. The coordinator helped community members improve streamside land use practices, conserve water, and manage natural resources.
- ◆ Installed, monitored, and modified several instream installations that provide passage and shelter for fish and other aquatic species. The projects were also used to teach the community about the watershed.
- Provided input to several planning and policy processes that affect land and water in the watershed.
- Continued reach-scale restoration programs at Nathanson Creek and at Sonoma Creek near Glen Ellen.
- ♦ Helped residents recover from the damage caused by the 12/31/2005 flooding. The coordinator provided technical advice on debris management, flood facts, stream functions, historical context, and repair options to over 30 landowners and three newspapers.
- Helped to sustain the Sonoma Creek Watershed Conservancy. The conservancy consists of several agricultural, environmental, and regulatory entities
- Presented a slide show to the community at a flood forum. Over 175 people attended the forum.
- Provided a prioritized list of fish passage barriers to the Center for Ecosystem Management and Restoration. The Center is currently coordinating fish barrier priorities throughout the San Francisco Bay area.
- Provided detailed recommendations to Deer Creek Estates, a condominium association on Sonoma Creek regarding water use, streamside practices, and member education.

# **Benefits to CALFED Program**

**Watershed Management** – In support of Watershed Program goals the coordinator:

- Participated in the local TMDL steering committee;
- Built a collaborative network of local watershed groups in the North San Francisco Bay;
- Participated in the San Francisco Bay IRWMP and North Bay IRWMP processes;
- Built subwatershed groups tied to reach scale restoration initiatives;
- And, educated landowners and residents about land and water use practices that help conserve resources.

**Ecosystem Restoration** – In support of Ecosystem Restoration Program goals the coordinator:

- Collaborated with Sonoma county to conduct road-related fish passage and streambank stability projects;
- Brought together several interests to find solutions to complex river and salmonid restoration needs on Sonoma Creek and tributaries;
- And, encouraged and supported riparian and aquatic habitat improvements by landowners, school children, and public agencies.

**Water Use Efficiency** – To help reach the goals of the Water Use Efficiency program the coordinator:

- Pursued partnerships with researchers, agencies, and funders to build a water budget that will inform sustainable and efficient use of water.
- Worked with other entities in Sonoma County on efforts to create policies assuring a long-term supply of water for humans and nature.

## **Performance Measures**

**Goal:** A self-sustaining population of wild salmonids in Sonoma Creek and tributaries. October through December 2005.

**Objective:** Increase summer survival of steelhead.

**Performance Measure:** Increase or no change in the 3-year moving average of steelhead per linear stream unit.

**Progress:** The coordinator has submitted proposals to CDFG and NOAA fisheries in attempt to obtain funding for follow-up steelhead population surveys.

**Objective 2:** Increase the mileage of spawning habitat accessible to migrating salmonids.

**Performance Measure:** At least 12 additional miles of spawning habitat accessible to steelhead, via physical improvements or securing funds for physical projects.

**Progress:** The coordinator facilitated the modification of a bridge apron on Calabazas Creek on Dunbar Road, which resulted in improved access to three miles of top-quality fish habitat. The coordinator also worked with the Center for Ecosystem Management and Restoration to raise money for fish passage barrier projects in Sonoma Valley.

This performance measure is over 25% complete.

**Objective 3:** Reduce sediment inputs caused by current land use practices.

**Performance Measure:** Average severity index – a measure of salmonid physiological stress based on stream water turbidity levels during and after storms – less than eight.

**Progress:** Severity index has been calculated during storms each winter using automated and grab samples. Limited Factors Analysis used data collected through the 2004/2005 winter to conclude that while turbidity and suspended sediment are problematic for salmonids, these factors are likely less damaging than the lack of shelter and summer flow.

**Objective 4:** Reduce sediment from chronically unstable stream channels.

**Performance Measure:** At least \$85,000 secured to proceed with next phase of a reach-scale channel rehabilitation project.

**Progress:** No funding has been secured for the next phase of the reach-scale channel rehabilitation project.

**Objective 5:** Optimize water usage by various sectors in Sonoma Valley and beyond.

**Performance Measure:** An increase from 2000 levels, or no change, in the 3-year average summer water levels measured at seven designated main stem and tributary sites.

**Progress:** The progress on this performance measure will be determined after the summer 2006 monitoring has been completed.